UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,925	06/21/2001	Jack Chen	320528153US	3893

25096 7590 09/08/2008

PERKINS COIE LLP
PATENT-SEA
P.O. BOX 1247
SEATTLE, WA 98111-1247

EXAMINER	
VILLECCO, JOHN M	
ART UNIT	PAPER NUMBER
2622	

MAIL DATE	DELIVERY MODE
09/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/884,925	CHEN ET AL.	
	Examiner	Art Unit	
	JOHN M. VILLECCO	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-21 and 28-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-21 and 28-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed July 24, 2008 have been fully considered but they are not persuasive.

2. Regarding the 35 U.S.C. §103(a) rejection of claims 15-17, 19, 28-31, 34-37, and 39-41 applicant argues several points.

a. Firstly, applicant argues that the Examiner fails to establish a prima facie case of obviousness since it lacks an articulated reasoning as to why it would have been obvious to modify Oliver according to the teachings of Hashimoto. The Examiner respectfully disagrees with this assessment. Along with the Examiners reasoned statement pointed out by the applicant, the Examiner has also stated that the multimedia data file of Hashimoto provides a way of transferring out the image and audio data in relation to each other. See page 5 of the previous office action. Another motivation to combine would be the ability to transfer data from the computer without transferring the relation information. See column 11, lines 25-32. By not including relation information in the transferred data, less data needs to be transferred. Furthermore, applicant is reminded that motivation to combine need not come directly from the reference themselves, but also from the knowledge of one of ordinary skill in the art.

b. Secondly, applicant argues that one of ordinary skill in the art would not modify according to the teachings of Hashimoto. Applicant backs up this assertion by reasoning, that since the image and sound files are received by the file transfer software in Oliver as

separate files (col. 6, lines 52-57 of Oliver), that this teaches against the Hashimoto reference of transferring the image and sound files as one multimedia file. However, the Examiner respectfully disagrees with this argument. No detail is given in Oliver as to how the connected image and sound data are transferred. Oliver merely states that in the camera they are stored as separate files (col. 6, lines 14-17), that they are copied to another device (col. 6, lines 28-30), and that they are also separate files after being received in the host computer (col. 6, lines 52-57). No information is given as to the specific details of the transfer of image data out of the camera to the host device. While Oliver does disclose that the separate image data and audio data are copied to the host device, no detail is provided as to how this is accomplished. Hashimoto clearly discloses that a multimedia data file is created using separate image and audio data (col. 11, lines 20-42) and further that the image and audio data are separated upon being received (column 11, lines 43-61). Thus, similarly to Oliver, the image and audio data are separated in both the camera and the host device of Hashimoto. One of ordinary skill in the art could easily have looked to Hashimoto as a way of transferring the image and audio data out of Oliver. One of ordinary skill in the art could easily see that this arrangement provides a convenient way of associating image and audio data with each other without having to transfer relation information, thereby cutting down the amount of data that needs to be transferred. Therefore, it is the opinion of the Examiner that one of ordinary skill in the art could have easily modified Oliver to transfer the image and sound data similarly to Hashimoto.

3. For the reasons stated above, the rejections from the previous office action will be repeated.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 15-17, 19, 28-31, 34-37, and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent No. 6,289,140) in view of Hashimoto et al. (U.S. Patent No. 6,111,604).

6. Regarding ***claim 15***, Oliver discloses a scanner or digital camera capable of using voice commands to carry out operations. More specifically, Oliver discloses an image pickup component (image pickup, 112) for transforming the image signal into a first analog signal, a sound pickup component (voice pickup, 102) for capturing a sound signal (col. 5, lines 44-47) and a voice command (col. 5, lines 7-43), a second analog-digital converter (A/D converter, 104) connected to the sound pickup component (voice pickup, 102) for converting the second analog signal to a second digital signal, and a processor (controller, 106) for generating image and sound files, and carrying out processor actions, in response to a determination that the second digital signal corresponds to a voice control command. For instance, after processing the voice data and determining a command has been said, the processor carries out the command. Commands include "scan", "save", "delete", "left", "zoom in", and "send". See column 2, lines

47-60 and column 5, line 1 to column 6, line 30. Although, Oliver provides more detail on how a scanner would operate, Oliver does disclose that the invention could also be implemented into a digital camera. Therefore, if the invention where implemented into a digital camera, a first analog-digital converter would inherently have to be included in order to generate a digital image signal. In addition, Oliver discloses that the sound signal is received non-contemporaneously with the image signal since it is capture after the document is scanned (col. 5, lines 44-48).

Oliver, however, fails to specifically disclose that the processor produces a multimedia data file comprising image and sound information in response to the voice control command. Hashimoto, on the other hand, discloses that it was well known in the art at the time the invention was made to generate a multimedia data file for transfer of image and sound data out of an image pickup device. More specifically, Hashimoto discloses a camera (100) which uses a CCD (9) and microphone (1) to capture image and sound data, respectively. Before, the transfer of image and audio data out of the camera, a relation file is read to determine the relationship between image and audio files. Thereafter, a multimedia data file (27) is generated with image and audio data for transfer out of the camera (100). The generated file allows for the related data to be transferred out in relation to each other. See column 11, lines 18-42. Thus, by generating one file for transfer, the image and audio data will always be associated with each other at the destination location. No detail is given in Oliver as to how the connected image and sound data are transferred. Oliver merely states that in the camera they are stored as separate files (col. 6, lines 14-17), that they are copied to another device (col. 6, lines 28-30), and that they are also separate files after being received in the host computer (col. 6, lines 52-57). No information is given as to the specific details of the transfer of image data out of the camera to the host device.

While Oliver does disclose that the separate image data and audio data are copied to the host device, no detail is provided as to how this is accomplished. Hashimoto clearly discloses that a multimedia data file is created using separate image and audio data (col. 11, lines 20-42) and further that the image and audio data are separated upon being received (column 11, lines 43-61). Thus, similarly to Oliver, the image and audio data are separated in both the camera and the host device of Hashimoto. One of ordinary skill in the art could easily have looked to Hashimoto as a way of transferring the image and audio data out of Oliver. One of ordinary skill in the art could easily see that this arrangement provides a convenient way of associating image and audio data with each other without having to transfer relation information, thereby cutting down the amount of data that needs to be transferred. Therefore, it is the opinion of the Examiner that one of ordinary skill in the art could have easily modified Oliver to transfer the image and sound data similarly to Hashimoto. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate a multimedia data file for transfer out of the camera of Oliver, when a "send" or "send all" command is said, so that the related image and sound data are always transferred and associated with each other at the destination location while eliminating the transfer of the relation information.

7. As for ***claim 16***, Hashimoto discloses the use of a lens (7) for focusing the image signal and a photoelectric converting element (CCD, 9) for sensing the focusing image signal to generate a first analog signal.

8. With regard to ***claim 17***, Hashimoto discloses the use of a CCD (charge coupled device) used as the photoelectric converting element.

9. Regarding ***claim 19***, Oliver discloses that their invention can be used in scanner, as well as a digital camera. Official Notice is taken as to the fact that it is well known in the art that scanners often include reflection mirrors to reflect light to a lens set. The use of a reflection mirror allows for the redirection of the optical axis along a different direction, often making the dimensions of the scanner smaller. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reflection mirror in the scanner of Oliver for reflecting light from a document to a lens set in order to make the dimensions of the scanner smaller.

10. As for ***claim 28***, Oliver discloses a scanner or digital camera capable of using voice commands to carry out operations. More specifically, Oliver discloses an image pickup component (image pickup, 112) for generating a digital signal of an object, and a sound pickup device (voice pickup, 102) and A/D converter (104) for generating a sound digital signal (col. 5, lines 44-47) and a voice signal (col. 5, lines 7-43) capable of being used in a voice recognition routine. In addition, Oliver discloses a processor (controller, 106) for generating image and sound files, and carrying out processor actions, in response to a determination that the sound digital signal corresponds to a voice control command. For instance, after processing the voice data and determining a command has been said, the processor carries out the command. Commands include "scan", "save", "delete", "left", "zoom in", and "send". See column 2, lines 47-60 and column 5, line 1 to column 6, line 30. Although Oliver provides more detail on how a scanner would operate, Oliver does disclose that the invention could also be implemented into a digital camera. Therefore, if the invention where implemented into a digital camera, a first analog-digital converter would inherently have to be included in order to generate a digital image

signal. In addition, Oliver discloses that the sound signal is received separately from the image signal since it is capture after the document is scanned (col. 5, lines 44-48).

Oliver, however, fails to explicitly disclose the use of a multiplexer and processor for generating a multimedia data file. Hashimoto, on the other hand, discloses that it was well known in the art at the time the invention was made to multiplex image and sound data and to generate a multimedia data file for transfer of image and sound data out of an image pickup device. More specifically, Hashimoto discloses an image pickup device (photographing portion, 6) for generating a image digital signal of an object, a sound pickup device (microphone, 1 and A/D converter, 4) for generating a sound digital signal, a multiplexer and a processor (CPU, 23 and FIFO circuit, 23) for combining the digital image and sound signals and producing a single file for transmission to the external device. Hashimoto discloses a camera (100) which uses a CCD (9) and microphone (1) to capture image and sound data, respectively. Before, the transfer of image and audio data out of the camera, a relation file is read to determine the relationship between image and audio files. Thereafter, a multimedia data file (27) is generated with image and audio data for transfer out of the camera (100). The generated file allows for the related data to be transferred out in relation to each other. See column 11, lines 18-42. Thus, by generating one file for transfer, the image and audio data will always be associated with each other at the destination location. No detail is given in Oliver as to how the connected image and sound data are transferred. Oliver merely states that in the camera they are stored as separate files (col. 6, lines 14-17), that they are copied to another device (col. 6, lines 28-30), and that they are also separate files after being received in the host computer (col. 6, lines 52-57). No information is given as to the specific details of the transfer of image data out of the camera to the host device.

While Oliver does disclose that the separate image data and audio data are copied to the host device, no detail is provided as to how this is accomplished. Hashimoto clearly discloses that a multimedia data file is created using separate image and audio data (col. 11, lines 20-42) and further that the image and audio data are separated upon being received (column 11, lines 43-61). Thus, similarly to Oliver, the image and audio data are separated in both the camera and the host device of Hashimoto. One of ordinary skill in the art could easily have looked to Hashimoto as a way of transferring the image and audio data out of Oliver. One of ordinary skill in the art could easily see that this arrangement provides a convenient way of associating image and audio data with each other without having to transfer relation information, thereby cutting down the amount of data that needs to be transferred. Therefore, it is the opinion of the Examiner that one of ordinary skill in the art could have easily modified Oliver to transfer the image and sound data similarly to Hashimoto. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate a multimedia data file for transfer out of the camera of Oliver, when a "send" or "send all" command is said, so that the related image and sound data are always transferred and associated with each other and the destination location while eliminating the transfer of the relation information.

11. With regard to ***claim 29***, Oliver discloses that the image pickup component (image pickup, 112) receives an image signal and inherently converts it to an analog signal. Furthermore, although Oliver provides more detail on how a scanner would operate, Oliver does disclose that the invention could also be implemented into a digital camera. Therefore, if the invention where implemented into a digital camera, a first analog-digital converter would

inherently have to be included in order to generate a digital image signal. Additionally, Oliver discloses the use of an A/D converter (104) for converting the sound data to a digital signal.

12. Regarding ***claim 30***, Oliver discloses that their invention can be used in scanner, as well as a digital camera. Official Notice is taken as to the fact that it is well known in the art that scanners often include reflection mirrors to reflect light to a lens set. The use of a reflection mirror allows for the redirection of the optical axis along a different direction, often making the dimensions of the scanner smaller. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reflection mirror in the scanner of Oliver for reflecting light from a document to a lens set in order to make the dimensions of the scanner smaller. Additionally, Hashimoto discloses that cameras typically include a lens (7) and photoelectric converting element (CCD, 9).

13. As for ***claim 31***, Hashimoto discloses the use of a CCD (charge coupled device) used as the photoelectric converting element.

14. With regard to ***claim 34***, as mentioned above in the discussion of claim 28, the combination of Oliver and Hashimoto discloses all of the limitations of the parent claim. While both Oliver and Hashimoto disclose the use of a controller (106) and CPU (23), respectively, neither of the aforementioned reference specifically discloses that the processor produces the multimedia file via a multitasking operation. Official Notice is taken as to the fact that it is well known in the art that CPU's commonly perform applications or operations via a multitasking function. Multitasking operations allow for multiple tasks to be carried out virtually simultaneously by sharing the CPU time per application. Therefore, it would have been obvious to enable the CPU or microprocessor of the camera of Hashimoto or Oliver to generate the

multimedia data file via a multitasking operation so that the CPU can carry out more than one operation at a time.

15. ***Claim 35*** is considered a method claim corresponding to claim 15. Please see the discussion of claim 15 on the preceding pages.

16. ***Claim 36*** is considered a method claim corresponding to claim 16. Please see the discussion of claim 16 on the preceding pages.

17. ***Claim 37*** is considered a method claim corresponding to claim 17. Please see the discussion of claim 17 on the preceding pages.

18. As for ***claim 39***, which depends upon claim 35, an image sensor can be considered a scanning device. Additionally, Oliver specifically discloses that his invention can be implemented in a scanning device.

19. ***Claim 40*** is considered a means plus function claim corresponding to claim 15. Please see the discussion of claim 15 on the preceding pages.

20. ***Claim 41*** is considered a method claim corresponding to claim 16. Please see the discussion of claim 16 on the preceding pages.

21. **Claims 18, 32, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent No. 6,289,140) in view of Hashimoto et al. (U.S. Patent No. 6,111,604) and further in view of Maxium Technologies (Internet Publication, 2000)**.

22. Regarding ***claims 18, 32, and 38***, as mentioned above in the discussion of claim 16 and 35, respectively, the combination of Oliver and Hashimoto discloses all of the limitations of the parent claim. However, the combination of the aforementioned references fails to explicitly state

that the image sensor is a CIS. The Maxium Technologies Publication on the other hand, discloses that the use of contact image sensors (CIS) is well known in the art. The integration of CIS image sensors reduces the space needed for other components allowing for thinner and lighter products. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a CIS image sensor instead of the CCD image sensor in Hashimoto or Oliver so that the camera is made smaller and lighter.

23. **Claims 20, 21, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent No. 6,289,140) in view of Hashimoto et al. (U.S. Patent No. 6,111,604) and further in view of Haranishi (U.S. Patent No. 5,764,779)**.

24. Regarding ***claims 20 and 33***, as mentioned above in the discussion of claim 15, the combination of Oliver and Hashimoto discloses all of the limitations of the parent claim. The aforementioned reference, however, fail to explicitly state that the microphone includes a filter for filtering off a noise signal from the analog signal. Haranishi, on the other hand, discloses that it is well known in the art to provide filters in a microphone for filter off noise. More specifically, Haranishi discloses a bandpass filter (2) for filter out noise from a microphone (1) and allowing only desired frequencies to pass. This feature allows for the microphone to only allow frequencies of the human voice to pass, thus increasing the quality of the signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a filter in the microphone of Hashimoto or Oliver so that a higher quality sound signal is generated.

25. As for ***claim 21***, Haranishi discloses only allowing frequencies of the human voice to pass through the bandpass filter (2). See the abstract.

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. VILLECCO whose telephone number is (571)272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN M. VILLECCO/
Primary Examiner, Art Unit 2622
September 2, 2008